

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE,
AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

1. (Currently amended) An electric machine, comprising:
 - a housing defining an axis;
 - a coolant entry arranged on one side of the housing for entry of coolant;
 - a cylindrical magnet arrangement received in the housing and defining a circumference, said magnet arrangement having axial bores; and
 - a cooling device for cooling the magnet arrangement, wherein the cooling device has a ring-shaped coolant channel extending about an outer circumference of the magnet arrangement and being fluidly connected with the coolant entry ~~to receive~~ such that incoming coolant from the coolant entry flows radially directly onto the magnet arrangement, and separate outer circumferential rectilinear axial channels in fluid communication with the coolant channel so that ~~to guide~~ the coolant is guided in axial direction through the axial channels to an opposite side of the housing and from there is guided inwardly and back in opposite axial direction via the axial bores to the one side for expulsion through an outlet, wherein the ring-shaped coolant channel and the axial channels are configured such that incoming coolant is first distributed by the ring-shaped coolant channel in a circumferential direction before entering the axial channels and flowing essentially uniformly about the circumference of the cylindrical magnet arrangement.
2. (Previously presented) The electric machine as claimed in claim 1, wherein the coolant channel is part of the housing.
- 3.-4. (Canceled)

5. (Previously presented) The electric machine as claimed in claim 1, wherein the magnet arrangement has a laminated core forming a wall of the coolant channel.
6. (Previously presented) The electric machine as claimed in claim 1, wherein the coolant channel is arranged upstream of the cylindrical magnet arrangement, as viewed in an axial direction.
7. (Previously presented) The electric machine as claimed in claim 1, wherein the coolant channel is open in one or both axial directions, and further comprising a bearing shield and/or an annular cover for covering the coolant channel.
8. (Canceled)
9. (Previously presented) The electric machine as claimed in claim 1, further comprising a motor terminal junction box, wherein the coolant channel has a reduced dimension in a radial direction in a region of the motor terminal junction box.
10. (Previously presented) The electric machine as claimed in claim 1, wherein the housing is constructed in the form of a pressure plate structure.
11. (Currently amended and withdrawn) A method for cooling an electric machine having a cylindrical magnet arrangement, comprising the steps of:
 - introducing a coolant stream through a coolant entry, and
 - distributing the coolant stream, after being introduced into the electric machine at commencement of a cooling operation, essentially uniformly about a circumference of the magnet arrangement via a ring-shaped coolant channel extending about an outer circumference of the magnet arrangement and being fluidly connected with the coolant entry such that incoming coolant from the

coolant entry flows radially directly onto the magnet arrangement, and via separate outer circumferential rectilinear axial channels which are in fluid communication with the coolant channel so that the coolant is guided in axial direction through the axial channels to an opposite side of the housing and from there is guided inwardly and back in opposite axial direction via the axial bores to the one side for expulsion through an outlet, wherein incoming coolant is first distributed by the ring-shaped coolant channel in a circumferential direction before entering the axial channels and flowing essentially uniformly about the circumference of the cylindrical magnet arrangement.

12. (Withdrawn) The method as claimed in claim 11, wherein the coolant stream is distributed on the magnet arrangement completely about the circumference before conducted in a radial or axial direction.
13. (Withdrawn) The method as claimed in claim 11, wherein the coolant stream, when being conducted around the magnet arrangement in a circumferential direction, is conducted directly past a laminated core of the magnet arrangement.
14. (Withdrawn) The method as claimed in claim 11, wherein the coolant stream is distributed in a circumferential direction upstream of the cylindrical magnet arrangement in an axial direction, before being conducted about the magnet arrangement.
15. (Withdrawn) The method as claimed in claim 11, wherein the coolant stream, after being distributed in the circumferential direction, is conducted in both axial directions.

16. (Previously presented) The electric machine as claimed in claim 1, wherein the housing has opposite drive and non-drive sides, said coolant entry being arranged on the non-drive side.
17. (Previously presented) The electric machine as claimed in claim 1, wherein the coolant entry is arranged on the coolant channel axially with respect to the cylindrical magnet arrangement.
18. (Previously presented) The electric machine as claimed in claim 1, wherein the coolant channel has a cross section which is greater than a summed cross section of the axial channels.
19. (Previously presented) The electric machine as claimed in claim 1, wherein each of the axial channels is defined by a cross section which is smaller than a cross section of the ring-shaped coolant channel so that a flow resistance applied by the ring-shaped coolant channel is smaller than a flow resistance applied by the axial channels to thereby force the coolant to flow first in the ring-shaped coolant channel in the circumferential direction.